RECEIVED

MAR 2 3 2007

DEPARTMENT OF ENVIRONMENTAL QUALITY
STATE A QUALITY

Mountain Home AFB Title V Operating Permit Application

Submitted to

Idaho Department of Environmental Quality

January 2007

Contents

Section	Page
Background	vi
Facility Description	vi
1.0 Application Forms	1-1
1.1 Introduction	1-1
1.2 Abrasive Blasting Forms	1-3
1.3 External Combustion Forms	1-6
1.4 Internal Combustion Forms	1-15
1.5 Jet Engine Testing Forms	1-30
1.6 Surface Coating Forms	1-33
1.7 Fugitive Dust Forms	1-42
2.0 General Information for the Facility	2-1
2.1 Introduction	2-1
2.2 Abrasive Blasting	2-1
2.3 External Combustion Engines	2-2
2.4 Internal Combustion Engines	2-2
2.4.1 Flightline Generators	2-2
2.4.2 Hospital Generators	2-3
2.5 Jet Engine Testing	2-3
2.6 Surface Coating	2-3
2.6.1 Aircraft Paint Booth	2-4
2.6.2 Aircraft Parts Paint Booth	2-4
2.6.3 Flightline Open-Area Spraying	2-4
2.6.4 Transportation Paint Booth	2-4
2.7 Fugitive Sources	2-4
2.7.1 Landfill Operations	2-4
2.7.2 Paved Roads	2-5
2.7.3 Unpaved Roads	2-5
3.0 Specific Information for Each Emissions Unit	3-1
3.1 Introduction	3-1
4.0 Emissions Estimates	4-1
4.1 Introduction	4-1
4.2 Abrasive Blasting Emissions	4-1
4.3 External Combustion Engine Emissions	4-2
4.4 Internal Combustion Engine Emissions	4-2
4.4.1 Barrier Flightline Generators	4-2
4.4.2 Hospital Generators	4-3
4.5 Jet Engine Testing	4-3

Section	Page
4.6 Surface Coating	4-3
4.6.1 Transportation Paint Booth	4-4
4.6.2 Aircraft Paint Booth	4-4
4.6.3 Aircraft Parts Paint Booth	4-4
4.6.4 Flightline Open-Area Spraying	4-4
4.7 Fugitive Sources	4-4
4.7.1 Landfill Operations	4-5
4.7.2 Paved and Unpaved Roads	4-5
4.8 Emission Estimates Summary	4-5
5.0 Applicable Requirements	5-1
5.1 Introduction	5-1
6.0 Other Requirements	6-1
6.1 Introduction	6-1
7.0 Proposed Exemptions and Determinations of Nonapplicability	7-1
7.0 Frograduation	7-1
8.0 Alternative Operating Scenarios	8-1
8.1 Introduction	8-1
8.1.1 Alternative Scenario 1: Jet Engine Testing Bubble Limit	8-1
8.1.2 Alternative Scenario 2: Operational Changes and/or Addition of	
Devices Exempt from Permits to Construct	8-1
8.1.3 Alternative Scenario 3: President Determines Operations in	
Excess of Operating Permit Limits are of Paramount Importance to the	
United States	8-2
9.0 Compliance Certifications	9-1
9.1 Compliance Certification Rule	9-1
9.1 Compliance Certification Rule 9.2 Applicability Review and Compliance Certification Summary	9-1
10.0 Compliance Certification During Permit Term Summary	10-1
10.1 Compliance Certification Rules	10-1
10.1 Compliance Plans Summary	10-2
11.0 Trading Scenarios	11-1
11.1 Introduction	11-1
12.0 Additional Information	12-1
12.1 Introduction	12-1
12.1 Introduction	12-1
12.2.1 Presumptively Insignificant Activities	12-1
12.2.1 Presumptively Hisignificant Activities Based on Size or Production Rate	12-3

Appendixes

	Tr. ID	ACTIVITIES AND
Α	Tier I Pe	rmit
	TICLITIC	TITLE

- B Emission Estimates
- C Certified Letter—PTC Revisions
- D Insignificant Activities

Tables		Page
1.3-1	ECOM Description	1-6
1.4-1	ICOM Description	15
1.5-1	Jet Engine Testing	1-30
1.6-1	Surface Coating Description	1-33
1.7-1	Fugitive Dust	1-42
4.4-1	Potential Barrier Flightline Generator Emission Rate Limits	4-2
4.5-1	Permitted Annual Hush House Emission Rate Limits	4-3
4.8-1	Potential Emission Estimates Summary for Calendar Year 2005	4-6
4.8-2	Actual Emission Estimates Summary for Calendar Year 2005	4-8
5.1-1	Significant Applicable Regulations Summary by Emissions Unit	5-2
9.2-1	Facility Wide Applicability, Compliance Certification, and Method of	
7.12 I	Compliance at Time of Application (IDAPA 58.01.01 Rule 314.10(a)	9-2
10.2-1	Compliance Certification During Permit Term	10-2
12.2.2-1	Insignificant Emissions Unit Based on Size or Production Rate	12-4

Figures

- 1 Site Location Map
- 2 Site Plan

BOI063400001.DOC/KM

Background

On behalf of Mountain Home Air Force Base (MHAFB), CH2M HILL has prepared a Tier I Operating Permit renewal application for submittal to the Idaho Department of Environmental Quality (IDEQ). MHAFB is required to renew their Title V permit at least 6 months before the permit expiration date with the intent that the term of the operating permit does not expire before the permit is renewed in accordance with IDAPA 58.01.01.313.03 and permit condition 18 (Permit No. T1-040043). The current Tier I Operating Permit (Tier I) expiration date is October 29, 2007.

In the event IDEQ "fails to issue or deny the renewal permit before the end of the term of this permit, then all the terms and conditions of this permit including any permit shield that may have been granted pursuant to IDAPA 58.01.01.325 shall remain in effect until the renewal permit has been issued or denied," per IDAPA 58.01.01.322.15.p. A copy of the current Tier I is included in Appendix A.

This Tier I renewal application is being submitted to IDEQ by the United States Air Force (USAF), Air Combat Command (ACC), for MHAFB, Idaho. MHAFB is considered a major facility based on the potential to emit 100 tons per year or more of any regulated air pollutant per IDAPA 58.01.01.008.10.c.

Facility Description

MHAFB is located approximately 10 miles southwest of Mountain Home, Idaho (Figure 1, Site Location Map). The Base occupies approximately 9 square miles of contiguous property. It also operates the nearby Saylor Creek practice bombing range, the Grasmere Electronic Combat Site, the Small Arms Range, and the C.J. Strike Dam Site. The Base consists of an airfield and associated support facilities, residential areas for Base personnel, a hospital, schools, recreational facilities, a landfill, and a wastewater treatment plant (Figure 2, Site Plan).

MHAFB was established in 1942. The 366th Air Wing is the host organization. Its mission is to develop, maintain, and train combat air crews for worldwide mobility by using a fighter wing concept to meet peacetime and wartime contingency requirements. It serves at the forefront of military operations, with the capability to rapidly mobilize and deploy the F-16C Fighter Falcon, the F-15E Strike Eagle, and the F-15C Eagle.

MHAFB is located in Elmore County, a rural agricultural area of southwestern Idaho, approximately 3,000 feet above mean sea level. Elmore County is designated as unclassifiable for all regulated criteria pollutants (PM₁₀, CO, NO_x, SO₂, lead, and ozone).

The Tier I renewal application has been organized to present information in the order provided by IDAPA 58.01.01.314.

BOI063400001.DOC/KM

1.0 Application Forms

1.1 Introduction

IDAPA 314. Required Standard Application Form and Required Information.

01. General Requirements

- a. Applications shall be submitted on a form or forms provided by the Department or by other means prescribed by these rules or the Department. The application shall be certified by the responsible official in accordance with Section 123. If the Tier I source is regulated under 42 U.S.C. Sections 7651 through 76510, the owner or operator shall also submit nationally-standardized acid rain forms provided by EPA.
- b. All information shall be in sufficient detail so that the Department may efficiently and effectively determine the applicability of requirements and make all other necessary evaluations and determinations.

This section of the application provides the specific equipment forms for permitted emission units at MHAFB. Potential emissions were calculated in pounds per hour (lb/hr) and tons per year (tpy) based on the maximum operating capacity. The Application Forms include potential emission estimates for permitted sources. Actual emissions are based on the 2005 Air Emissions Inventory (CH2M HILL, March 2006) included with the potential emission estimates in Section 4.0.

Application forms are included for the following:

- General Information
- Abrasive Blasting (Bead Blasting)
- External Combustion Engines (ECOM)
 - Hospital Boilers
- Internal Combustion Engines (ICOM)
 - Barrier Flightline Generators (BFGs)
 - Hospital Generators
- Jet Engine Testing (JET)
- Surface Coating (Controlled Devices)
 - Aircraft (Large Paint Booth Building 1330)
 - Aircraft Parts (Small Paint Booth Building 1330)
 - Flightline Open-Area Spraying
 - Transportation Paint Booth (Building 1100)
- Fugitive Sources
 - Landfill Operations
 - Paved and Unpaved Roads



Form #AQ-F-P004 Revision: 1 12/15/06

AIR QUALITY TIER I OPERATING PERMIT APPLICATION EIVED

SECTION 1: GENERAL INFORMATION

MAR 2 3 2007

Company & Division Name:	Mountain Ho	me Air Force Base		DEPARTMENT OF ENVIRONMENTAL QUALITY OF AT A CHARGASA
Company Mailing Address:	366 Gunfight	er Avenue Suite 331		FLOORING THE STREET
City:		me Air Force Base	State: ID	Zip: 83648
Company Environmental Contact Name:	Bryan Trimbe	erger		
Title:	Air Quality M		Phone:	208-828-3724
Company Owner or Responsible Official	Col. Anthony	Rock		
Name: Title:	Wing Comm		Phone:	
Title.			484	7
Exact Plant Location:	-	outhwest of Mountain Ho	ome, Idaho	
General Nature of Business:	Department of			
No. Full-time Employees:	4902		Property Area (acres):	6844
Reason for Application:	□ Renewal □ Modification	I permit to operate Tier I permit to operate on/Amendment of existing f ownership or location	ng Tier I permit to operat	e
Distance to Nearest State Border (miles):	70			
Primary SIC:	9711		Secondary SIC:	11000
Plant Location County:	Elmore		Elevation (ft):	
UTM Zone:	11			
UTM (X) Coordinate (kM):	592.5	UTUUTI	M (Y) Coordinate (kM):	4767.0
LIST ALL FACILITIES WITHIN THE STATE EMISSIONS TO THE AIR. IF NOT, SO STA	THAT ARE UN TE.	IDER YOUR CONTROL	OR UNDER COMMON	
Name of Facility	-		F. STATE OF THE ST	
Saylor Creek Range			s southeast of Mountain	
Grasmere Electric Combat Site			s southwest of Mountain	
Off-site small arms range			northwest of Mountain Ho	
C.J. Strike dam site		Approximately 8 miles southwest of Mountain Home AFB Approximately 25 miles southeast of SCR		
Juniper Butte		Approximately 25 miles	s southeast of SON	
Owner or Responsible Official		Col Anthony Rock		
Title of Responsible Official		Wing Commander		
Owner or Responsible Official Title of Responsible Official	_ ·			
Certification of Truth, Accuracy, and Comp I hereby certify that based on information and any attached and/or referenced document(s)	belief formed a are true, accura	after reasonable inquiry.	cordance with IDAPA 58.	rmation contained in this and 01.01.123-124.

ANTHONY J. ROCK, Colonel, USAF Print or Type Responsible Official Name

1.2 Abrasive Blasting Forms

Only one permitted abrasive cleaner or "bead blaster" is located at MHAFB, which vents to the atmosphere. The bead blaster contains a small opening at the point of discharge from a self-contained hopper to a 55-gallon drum. This bead blaster is located at Building 1330 and is required to maintain an air quality Permit-to-Construct (PTC). Table 1.2-1 lists the permitted abrasive blasting source.

TABLE 1.2-1	
Ahracive Blasting	í

Process Code	Process Description ¹	Emission Estimate Documentation ²
ABCL-01	Blasting Booth inside Bldg 1330	Section 4.2

Notes:

¹ Refer to Section 2 of the permit application for additional detail.

² This column denotes the permit application section number of the emissions estimate documentation.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ USE ONLY	
DEQ Plant ID Code	DEQ Stack ID Code
DEQ Building Code	Primary SCC
DEQ Segment Code	Secondary SCC
DEQ Process Code	

SECTION 3, PART A.

GENERAL INFORMATION

Process Code or D	escription	Abrasive Blasting				
Stack Description		Stack No. 1				
Building Description	n	Building 1330				
Manufacturer F	Pavli and Griffin		Model	PRAM 151220	Date Installed	1995
			4		Date Last Modified	

PROCESSING DATA

Process Stream	Material Description	Maximum Hourly Rate	Actual Hourly Rate	Units
Input		-		-
Product Output				
Waste Output		-		
Recycle				V

POTENTIAL HAPS IN PROCESS STREAM(S)

HAP Description	HAP CAS Number	Fraction In Input Stream by Weight	Fraction In Product Stream by Weight	Fraction in Waste Stream by Weight	Fraction in Recycle Stream by Weight
Hexavalent Chromium	7440-47-3	0.7%	0.7%	0.7%	0.7%
	-				
	-			-	

OPERATING DATA

Percent Fuel Consumption P	er Quarter	Operatir	g Schedule	
Dec – Feb		Hours/Day	24	
Mar – May		Days/Week	7	
Jun – Aug		Weeks/Year	52	
Sep – Nov			***	
POLLUTION CONTROL EC	QUIPMENT			
Parameter			Primary	Secondary
Туре				
Type Code (from APP.A)				
Manufacturer	-	Pavli and Griffin		
Model Number		0240-050-01		
Pressure Drop (in. of water)				
Wet Scrubber Flow (GPM)				
Baghouse Air/Cloth Ration (FP	M)	_		
VENTILATION AND BUIL	DING/AREA	DATA	STACK DATA	
Enclosed?	☐ Yes	⊠ No	Ground Elevation (ft)	2990
Hood Type (from APP.B)			UTM X Coordinate (km)	591.26
Minimum Flow (acfm)			UTM Y Coordinate (km)	4767.52
Percent Capture Efficiency			Stack Type (see note below)	01
Building Height (ft)	48	-	Stack Exit Height from Ground Level (ft)	_4
Building/Area Length (ft)	296		Stack Exit Diameter (ft)	1.6
Building/Area Width (ft)	124		Stack Exit Gas Flowrate (acfm)	2980
			Stack Exit Temperature (°F)	67.7

			Estimated or		Allowable Emissions		
Pollutant PM	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	.tons/yr 2.57E-	Reference
				-	-		2
PM ₁₀	-				6-		
SO ₂					-		S
CO							-
NO _x							12-2-
VOC							-
Lead					-		
Cr+6	7440-47-3		-			6.9E- 05	- I
-		-		:			
					-		
						-	
					-	5	

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

1.3 External Combustion Forms

ECOM sources include boilers, furnaces, and heaters located in the industrial and administrative areas of the Base. Only the hospital boilers are permitted. Table 1.3-1 lists the permitted ECOM sources.

TABLE 1.3-1
FCOM Description

Process Code	Process Description ¹	Emission Estimate Documentation ²
ECOM-01	Hospital Boiler 1 (Kewanee)	Section 4.3
ECOM-02	Hospital Boiler 2 (Kewanee)	Section 4.3
ECOM-03	Hospital Boiler 3 (Kewanee)	Section 4.3
ECOM-04	Hospital Boiler 4 (Hurst)	Section 4.3

Notes:

¹ Refer to Section 2 of the permit application for additional detail.

² This column denotes the permit application section number of the emissions estimate documentation.

DEQ USE ONLY	
DEQ Plant ID Code	DEQ Stack ID Code
DEQ Building Code	Primary SCC
DEQ Segment Code	Secondary SCC
DEQ Process Code	

SECTION 2, PART A.

GENERAL INFORMATION

Process Code o	r Description	ECOM-01 Hospital Boiler 01				
Stack Description	on	Stack No. 1				
Building Descrip	otion	Building 6000				
Manufacturer	Kewanee	Model	LSW-125-GO		Date Installed	1998
					Date Last Modified	
RATED CAPA	CITY (CHOOS	E APPROPRIATE UNITS)				
Million BTU/hr	5.231	1000 lbs Steam/hr		Kilowatts	Horsepower	
Burner Type		% Used for Process	1.5			
AND THE PERSON NAMED IN	(see note below)	% Used for Space Heat	98.5			

FUEL DATA

Parameter	Primary Fuel	Units	Secondary Fuel	Units
Fuel Code (see note below)	01		02	
Percent Sulfur	0		0.5	
Percent Ash	0		0	
Percent Nitrogen	1.5		0	
Percent Carbon	0.33		0	
Percent Hydrogen	0		0	
Percent Moisture	0		0	
Heat Content (BTU/unit)	1024	CF	133440	Gallons
Maximum Hourly Combustion Rate (units/hr)	0.005	MMCF	39.2	Gallons
Normal Annual Combustion Rate (units/hr)	4.01	MMCF	0	Gallons

Note:

Burner Type: 01 - Spread stoker

02 - Chain or Traveling Grate

03 - Hand Fired

04 - Cyclone Furnace

05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal)

07 - Underfeed Stokers

08 - Tangentially Fired

09 - Horizontally Fired

10 - Axially Fired

11 - Other (specify):

Fuel Codes:

01 - Natural Gas

02 - #1 or #2 Fuel Oil

03 - #4 Fuel Oil

04 - #5 or #6 Fuel Oil

05 - Used Oil

06 - Wood Chips

07 - Wood Bark

08 - Wood Shavings

09 - Sander Dust

10 - Subbituminous Coal

11 - Bituminous Coal

12 - Anthracite Coal

13 - Lignite Coal

14 - Propane

15 - Other (specifiy):

OPERATING DATA

OPERATING DATA					
Percent Fuel Consumption F	er Quarter	Operatir	ng Schedule		
Dec – Feb		Hours/Day	24		
Mar – May		Days/Week	7		
Jun – Aug		Weeks/Year	52		
Sep - Nov					
POLLUTION CONTROL E	QUIPMENT				
Parameter			Primary		Secondary
Туре		None		None	
Type Code (from APP.A)					
Manufacturer					
Model Number					
Pressure Drop (in. of water)					
Wet Scrubber Flow (GPM)					
Baghouse Air/Cloth Ration (FP	M)	·			
VENTILATION AND BUILD	DING/AREA D	ATA	STA	CK DATA	
Enclosed?	⊠ Yes [☐ No	Ground Elevation (ft)		2990
Hood Type (from APP.B)	NA		UTM X Coordinate (km)	592.2
Minimum Flow (acfm)	NA		UTM Y Coordinate (km	1)	4767.1
Percent Capture Efficiency	NA	<u>.</u>	Stack Type (see note b	oelow)	03
Building Height (ft)	35		Stack Exit Height from	Ground Level (ft)	48
Building/Area Length (ft) 600			Stack Exit Diameter (ft)	3.0
Building/Area Width (ft)	200		Stack Exit Gas Flowrat	e (acfm)	60661
			Stack Exit Temperature	e (°F)	300

AIR POLLUTION EMISSIONS

Note:

State of the second		Emission	Percent	Estimated or		Allowable Emis	sions
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM	X-12			(155,11)	32.02.3	0.17	
PM ₁₀	-					0.17	
SO ₂						2.16	combined (3)Kewanee
CO						1.8	
NO _x						2.2	
voc					-	0.12	
Lead				-			
HAPs						0.04	
					-	-	(92
					-		0
		-				199	-

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

DEQ USE ONLY		和国家的一种基础的基础。
DEQ Plant ID Code	DEQ Stack ID Code	
DEQ Building Code	Primary SCC	
DEQ Segment Code	Secondary SCC	
DEQ Process Code		

SECTION 2, PART A.

GENERAL INFORMATION

01 1 5	Charle Na. 4	ECOM-02 Hospital Boiler 02				
Stack Description	Stack No. 1					
Building Description	Building 6000					
Manufacturer Kewanee	Model	LSW-125-GO		Date Installed	1998	
				Date Last Modified		
RATED CAPACITY (CHO	SE APPROPRIATE UNITS)	*				
Million BTU/hr 5.231	1000 lbs Steam/hr		Kilowatts	Horsepower		
Burner Type	% Used for Process	1.5	_			
(see note below	() % Used for Space Heat	98.5				

FUEL DATA

Parameter	Primary Fuel	Units	Secondary Fuel	Units
Fuel Code (see note below)	01		02	
Percent Sulfur	0		0.5	
Percent Ash	0		0	
Percent Nitrogen	1.5		0	
Percent Carbon	0.33		0	
Percent Hydrogen	0		0	
Percent Moisture	0		0	
Heat Content (BTU/unit)	1024	CF	133440	Gallons
Maximum Hourly Combustion Rate (units/hr)	0.005	MMCF	39.2	Gallons
Normal Annual Combustion Rate (units/hr)	4.01	MMCF	0	Gallons

Burner Type: 01 - Spread stoker

02 - Chain or Traveling Grate

03 - Hand Fired

04 - Cyclone Furnace

05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal)

07 - Underfeed Stokers

08 - Tangentially Fired

09 - Horizontally Fired 10 - Axially Fired

11 - Other (specify):

Fuel Codes:

01 - Natural Gas

02 - #1 or #2 Fuel Oil

03 - #4 Fuel Oil

04 - #5 or #6 Fuel Oil 05 - Used Oil

06 - Wood Chips

07 - Wood Bark

08 - Wood Shavings

09 - Sander Dust

10 - Subbituminous Coal

11 - Bituminous Coal 12 - Anthracite Coal

13 - Lignite Coal

14 - Propane

15 - Other (specifiy):

OPERATING DATA

Percent Fuel Consumption Per Quarter	Operating S	Schedule	
Dec – Feb	Hours/Day	24	
Mar – May	Days/Week	7	
Jun – Aug	Weeks/Year	52	
Sep – Nov			
POLLUTION CONTROL EQUIPMENT			
Parameter	Prin	nary	Secondary
Туре	None		None
Type Code (from APP.A)		-	(<u></u>
Manufacturer			0
Model Number			
Pressure Drop (in. of water)			
Wet Scrubber Flow (GPM)			
Baghouse Air/Cloth Ration (FPM)			

Enclosed?	
Hood Type (from APP.B)	NA
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	35
Building/Area Length (ft)	600
Building/Area Width (ft)	200

Ground Elevation (ft)	2990
UTM X Coordinate (km)	592.2
UTM Y Coordinate (km)	4767.1
Stack Type (see note below)	03
Stack Exit Height from Ground Level (ft)	48
Stack Exit Diameter (ft)	3.0
Stack Exit Gas Flowrate (acfm)	60661
Stack Exit Temperature (°F)	300

AIR POLLUTION EMISSIONS

	基础等的模型	Emission	Percent	Estimated or	(B) (B) (B)	Allowable Emis	ssions
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM					122-1-1	0.17	1
PM ₁₀			2			0.17	·
SO ₂						2.16	combined (3)Kewanee
CO						1.8	
NO _x						_2.2	
VOC						0.12	
Lead							
HAPs			<u> </u>			_0.04	
			(———				(
	-			7			2

<u>Note:</u> Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

DEQ USE ONLY		
DEQ Plant ID Code	DEQ Stack ID Code	· · · · · · · · · · · · · · · · · · ·
DEQ Building Code	Primary SCC	
DEQ Segment Code	Secondary SCC	
DEQ Process Code		

SECTION 2, PART A.

GENERAL INFORMATION

Process Code or D	escription	ECOM-03 Hospital Boiler 03				
Stack Description		Stack No. 1				
Building Description	n	Building 6000				
Manufacturer K	Kewanee	Model	LSW-125-GO		Date Installed	1998
Company (And Company)					Date Last Modified	
RATED CAPACI	TY (CHOOSE	APPROPRIATE UNITS)				
Million BTU/hr 5	5.231	1000 lbs Steam/hr		Kilowatts	Horsepower	
Burner Type		% Used for Process	1.5			
ts	see note below)	% Used for Space Heat	98.5			

FUEL DATA

Parameter	Primary Fuel	Units	Secondary Fuel	Units
Parameter	Finially 1 dei	O'IIIG	15	
Fuel Code (see note below)	01		02	
Percent Sulfur	0		0.5	
Percent Ash	0		0	
Percent Nitrogen	1.5		0	
Percent Carbon	0.33		. 0	
Percent Hydrogen	0		0	
Percent Moisture	0		0	
Heat Content (BTU/unit)	1024	CF	133440	Gallons
Maximum Hourly Combustion Rate (units/hr)	0.005	MMCF	39.2	Gallons
Normal Annual Combustion Rate (units/hr)	4.01	MMCF	0	Gallons

Note:

Burner Type: 01 - Spread stoker 02 - Chain or Traveling Grate

03 - Hand Fired 04 - Cyclone Furnace

05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal)

07 - Underfeed Stokers 08 - Tangentially Fired

09 - Horizontally Fired 10 - Axially Fired

11 - Other (specify):

Fuel Codes:

01 - Natural Gas

02 - #1 or #2 Fuel Oil

03 - #4 Fuel Oil

04 - #5 or #6 Fuel Oil

05 - Used Oil

06 - Wood Chips

07 - Wood Bark

08 - Wood Shavings

09 - Sander Dust

10 - Subbituminous Coal

11 - Bituminous Coal

12 - Anthracite Coal

13 - Lignite Coal

14 - Propane 15 - Other (specifiy):

OPERATING DATA					
Percent Fuel Consumption P	er Quarter	Operatir	ng Schedule		
Dec – Feb		Hours/Day	24		
Mar – May		Days/Week	7		
Jun – Aug		Weeks/Year	52		
Sep – Nov					
POLLUTION CONTROL EC	QUIPMENT				
Parameter			Primary		Secondary
Туре		None		None	
Type Code (from APP.A)					
Manufacturer					
Model Number					
Pressure Drop (in. of water)					
Wet Scrubber Flow (GPM)					
Baghouse Air/Cloth Ration (FP	M)	- 			
VENTILATION AND BUILI	DING/AREA	DATA	STA	CK DATA	
Enclosed?		□No	Ground Elevation (ft)		2990
Hood Type (from APP.B)	NA		UTM X Coordinate (km)	592.2
Minimum Flow (acfm)	NA		UTM Y Coordinate (km)	4767.1
Percent Capture Efficiency	NA		Stack Type (see note t	elow)	03
Building Height (ft)	35		Stack Exit Height from	Ground Level (ft)	48
Building/Area Length (ft)	600		Stack Exit Diameter (ft) - -	3.0
Building/Area Width (ft)	200		Stack Exit Gas Flowrat	e (acfm)	60661
			Stack Exit Temperature	e (°F)	300

AIR POLLUTION EMISSIONS

Note:

		Emission Percent	Percent	Estimated or		Allowable Emissions			
Pollutant .	CAS#	Factor Control (see below) Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference			
PM						0.17			
PM ₁₀						0.17			
SO ₂						2.16	combined (3)Kewanee		
СО						1.8			
NO _x						2.2			
VOC		200			-	0.12	-		
Lead									
HAPs				,					
			-		3-36	-	4		
		2002-2009			-	-	-		
		<u> </u>	-	12		+			
			-			1970.	£		

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

DEQ USE ONLY	
DEQ Plant ID Code	DEQ Stack ID Code
DEQ Building Code	Primary SCC
DEQ Segment Code	Secondary SCC
DEQ Process Code	

SECTION 2, PART A.

GENERAL INFORMATION

Process Code or Description	ECOM-04 Hospital Boiler 04				
Stack Description	Stack No. 2				
Building Description	Building 6000				
Manufacturer Hurst	Model	HVTG25150		Date Installed	1998
1				Date Last Modified	
RATED CAPACITY (CHOO	SE APPROPRIATE UNITS)				
Million BTU/hr 1.05	1000 lbs Steam/hr		_ Kilowatts	Horsepower	
Burner Type	% Used for Process	1.5			
(see note below	% Used for Space Heat	98.5			

FUEL DATA

Parameter	Primary Fuel	Units	Secondary Fuel	Units
Fuel Code (see note below)	01		02	
Percent Sulfur	0		0.5	
Percent Ash	0		0	
Percent Nitrogen	1.5		0	
Percent Carbon	0.33		0	
Percent Hydrogen	0		0	
Percent Moisture	0		0	
Heat Content (BTU/unit)	1024	CF	133440	Gallons
Maximum Hourly Combustion Rate (units/hr)	0.0012	MMCF	9	Gallons
Normal Annual Combustion Rate (units/hr)	10.5	MMCF	0	Gallons

Note:

Burner Type: 01 - Spread stoker 02 - Chain or Traveling Grate

03 - Hand Fired

04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal)

06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers

08 - Tangentially Fired

09 - Horizontally Fired

10 - Axially Fired

11 - Other (specify):

Fuel Codes:

01 - Natural Gas

02 - #1 or #2 Fuel Oil

03 - #4 Fuel Oil

04 - #5 or #6 Fuel Oil

05 - Used Oil

06 - Wood Chips

07 - Wood Bark

08 - Wood Shavings

09 - Sander Dust

10 - Subbituminous Coal

11 - Bituminous Coal

12 - Anthracite Coal

13 - Lignite Coal

14 - Propane

15 - Other (specifiy):

OPERATING DATA

Percent Fuel Consumption P	er Quarter	Operatin	ng Schedule		
Dec – Feb		Hours/Day	24		
Mar – May		Days/Week	7		
Jun – Aug		Weeks/Year	52		
Sep – Nov					
POLLUTION CONTROL EC	UIPMENT				
Parameter		F	Primary		Secondary
Туре		None		None	
Type Code (from APP.A)					
Manufacturer					
Model Number				1	
Pressure Drop (in. of water)				<u> Established</u>	
Wet Scrubber Flow (GPM)					
Baghouse Air/Cloth Ration (FP	M)	10 market			
VENTILATION AND BUILT	DING/AREA DA	NTA	STAC	K DATA	
Enclosed?	⊠ Yes □] No	Ground Elevation (ft)		2990
Hood Type (from APP.B)	NA		UTM X Coordinate (km)		592.2
Minimum Flow (acfm)	NA		UTM Y Coordinate (km)		4767.1
Percent Capture Efficiency	NA		Stack Type (see note be	elow)	03
Building Height (ft)	_ 35		Stack Exit Height from (Ground Level (ft)	48
Building/Area Length (ft)	600		Stack Exit Diameter (ft)		0.667
Building/Area Width (ft)	200	3	Stack Exit Gas Flowrate	e (acfm)	400
			Stack Exit Temperature	(°F)	500

Pollutant CAS#	Emission Percent	Percent	Estimated or		Allowable Emissions			
	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference	
PM						0.03	-	
PM ₁₀						0.03		
SO ₂	***************************************					0.14		
CO						0.36		
NO _x						0.45		
VOC				parameter and the second	-	0.02		
Lead			-					
HAPs						0.0008		
					-		3 <u> </u>	
			-	-	(i		T	
		-		-	-	-	-	

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

1.4 Internal Combustion Forms

ICOM sources include generators on the Base. The barrier flightline generators (BFGs) and the hospital generators are the only permitted ICOM sources on the Base. On October 4, 2006, MHAFB received a Permit-to-Construct (PTC) completeness determination for the BFG application. Table 1.4-1 lists the permitted ICOM sources.

TABLE 1.4-1

Process Code	Process Description ¹	Emission Estimate Documentation ²
ICOM-01	Hospital Generator 1	Section 4.4
ICOM-02	Hospital Generator 2	Section 4.4
ICOM-03	Hospital Generator 3	Section 4.4
ICOM-04	Barrier Flightline Generator 1	Section 4.4
ICOM-05	Barrier Flightline Generator 2	Section 4.4
ICOM-06	Barrier Flightline Generator 3	Section 4.4
ICOM-07	Barrier Flightline Generator 4	Section 4.4

Notes:

Refer to Section 2 of the permit application for additional detail
 This column denotes the permit application section number of the emissions estimate documentation.

Г	DEQ USE ONLY			74			1
DEQ Plant ID Code			DEQ Stack ID Code				
	DEQ Building Code	-	Primary SCC				
	DEQ Segment Cod	_			ndary SCC		
	DEQ Process Code				ermicental organisation		
L	DEG 1 100000 Cod			-			
GENERAL I	2, PART A.	ICOM 04 Hamiltonia	al Canarat	or 04			
	e or Description	ICOM 01 - Hospit	ai Generat	01 0 1			
Stack Descrip		Gen 01			No.		
Building Desc		Building 6000	NACALI	CD 4		Date Installed	
Manufacturer	Caterpillar		Model	_SR 4	-	Date Last Modified	
PATED CA	PACITY (CHOOS	E APPROPRIATE	UNITS)			Date Last Modified	
					1/11	Haranawar	
Million BTU/h	ır	_ 1000 lbs Steam/h		400	Kilowatts 750	Horsepower _	
Burner Type	(see note below)	_ % Used for Proce		100			
	(see note below)	% Used for Spac	e Heat	NA			
FUEL DATA	A						
	Parameter		Prima	ry Fuel	Units	Secondary Fuel	Units
Fuel Code (se	Fuel Code (see note below)		02			NA	
Percent Sulfu	ur		0.5			0	
Percent Ash			0			0	
Percent Nitro	gen		0			0	
Percent Carb	oon		0			0	
Percent Hydr	rogen		0			0	
Percent Mois	ture		0			0	
Heat Conten	t (BTU/unit)		133440		Gal	0	
Maximum Ho	ourly Combustion Ra	ite (units/hr)	49	9.4	Gal	. 0	
Normal Annu	al Combustion Rate	(units/hr)	24	700	Gal	0	
Note: Burner Type: 01 - Spread stoker 02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):			Fu	el Codes: 01 - Natural 02 - #1 or # 03 - #4 Fue 04 - #5 or # 05 - Used C 06 - Wood 0 07 - Wood 1 08 - Wood 1 09 - Sander 10 - Subbitt 11 - Bitumir 12 - Anthra- 13 - Lignite 14 - Propar	2 Fuel Oil I Oil 6 Fuel Oil Oil Chips Bark Shavings Dust Jiminous Coal Coal Coal		

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating Schedule		
Dec – Feb	25	Hours/Day	24	
Mar – May	25	Days/Week	7	
Jun – Aug	25	Weeks/Year	52	
Sep - Nov	25			

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)		·
Manufacturer		3
Model Number		
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILDING/AREA DATA

VENTIER TOUR PRINT	
Enclosed?	
Hood Type (from APP.B)	NA
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	35
Building/Area Length (ft)	600
Building/Area Width (ft)	200

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	592.2
UTM Y Coordinate (km)	4767.1
Stack Type (see note below)	03
Stack Exit Height from Ground Level (ft)	48
Stack Exit Diameter (ft)	0.83
Stack Exit Gas Flowrate (acfm)	4217
Stack Exit Temperature (°F)	734

AIR POLLUTION EMISSIONS

Note:

Y	Factor Control Emissio	Estimated or	Allowable Emissions			
CAS#		Emissions	lbs/hr	tons/yr	Reference	
	200,000	_ COMPRISON STORY			0.18	
					0.18	
					3.1	combined (3) gen
					1.38	
					18.1	combined (3) gen
					0.18	
		2				
	-			-	0.002	
		-	-	-	-	
	-	-			+	
				1		3. 22.22.23.24.2
	CAS#	CAS# Factor	CAS# Factor Control	CAS# Factor Control Measured Emissions	CAS# Factor Control Emissions Ibs/hr	CAS # Factor (see below) Efficiency Emissions (lbs/hr) tons/yr O.18 O.18 1.38 18.1

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

DEQ USE ONLY DEQ Plant ID Code DEQ Building Code DEQ Segment Code DEQ Process Code			DEQ Stack ID Code Primary SCC Secondary SCC				
SECTION	2, PART A.						
GENERAL I	NFORMATION						
Process Code	e or Description	ICOM 02 - Hospi	tal Generate	or 02			
Stack Descrip	otion	Gen 02					
Building Desc	cription	Building 6000		to the state of		DOM: D. V. Comp. N	
Manufacturer	Caterpillar	-	Model	SR 4		Date Installed _	
			· IINITO			Date Last Modified _	
RATED CAI	PACITY (CHOOS	E APPROPRIATE	: UNITS)				
Million BTU/h	r	1000 lbs Steam/h	nr		Kilowatts 75	Horsepower _	
Burner Type		% Used for Proce	ess	100			
	(see note below)	% Used for Space	e Heat	_NA	/		
FUEL DATA	1						
Parameter			Prima	ry Fuel	Units	Secondary Fuel	Units
Fuel Code (see note below)			0	2		NA	
Percent Sulfu	, , , , , , , , , , , , , , , , , , , ,		0	.5		0	
Percent Ash			()		0	
Percent Nitro	gen		0			0	
Percent Carb		-	0			0	
Percent Hydr			0			0	
Percent Mois			0			0	
Heat Content	ALEXANDER STATE		133440		Gal	0	
	urly Combustion Ra	te (units/hr)	49.4		Gal	0	
	al Combustion Rate		24	700	Gal	0	
Note: Burner Type: 01 - Spread stoker 02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):		veling Grate ace pulverized coal) pulverized coal) okers Fired		Fue	03 - #4 Fu 04 - #5 or 05 - Used 06 - Wood 07 - Wood 08 - Wood 09 - Sand 10 - Subb 11 - Bitun	#2 Fuel Oil uel Oil #6 Fuel Oil Oil d Chips d Bark d Shavings er Dust ituminous Coal racite Coal	

15 - Other (specifiy):

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating Schedule		
Dec – Feb	25	Hours/Day	24	
Mar – May	25	Days/Week	7	
Jun – Aug	25	Weeks/Year	52	
Sep - Nov	25			

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)		
Manufacturer	<u> </u>	
Model Number		
Pressure Drop (in. of water)		Control of the contro
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)	1	

VENTILATION AND BUILDING/AREA DATA

A FIGURALION WIND DOLLE	JINO/AKEA DATA	
Enclosed?		Gr
Hood Type (from APP.B)	NA	UT
Minimum Flow (acfm)	NA	UT
Percent Capture Efficiency	NA	Sta
Building Height (ft)	35	Sta
Building/Area Length (ft)	600	Sta
Building/Area Width (ft)	200	Sta

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	592.2
UTM Y Coordinate (km)	4767.1
Stack Type (see note below)	03
Stack Exit Height from Ground Level (ft)	48
Stack Exit Diameter (ft)	0.83
Stack Exit Gas Flowrate (acfm)	4217
Stack Exit Temperature (°F)	734

AIR POLLUTION EMISSIONS

Note:

Pollutant		Emission	Percent Control Efficiency	Estimated or		Allowable Emissions		
	CAS#	Factor (see below)		Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference	
PM	Fig. 4. a. s.	E # 10 10 10 10 10 10 10 10 10 10 10 10 10				0.18		
PM ₁₀						0.18	2	
SO ₂						3.1	combined (3) gen	
CO						1.38	4	
NO _x						18.1	combined (3) gen	
VOC					4	0.18		
Lead								
HAPs	-		-		-	0.002		
		-				-	<u> </u>	
		-	-		-			
		7/					-	

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

	DEQ USE ONLY						1
	DEQ Plant ID Code	9		DEQ	Stack ID Code		
DEQ Building Code DEQ Segment Code				Prima	ary SCC		
					ndary SCC		
	DEQ Segment Code DEQ Process Code						
		-				3(1	_
	2, PART A.						
	INFORMATION						
Process Cod	e or Description	ICOM 03 - Hospita	al Generate	or 03			-
Stack Descri		Gen 03					
Building Des	cription	Building 6000		The state of the s			
Manufacture	r Caterpillar		Model	SR 4	-	Date Installed	
DATED CA	BACITY (CHOOS	E APPROPRIATE	UNITS)			Date Last Modified	
Million BTU/	nr	_ 1000 lbs Steam/hr			Kilowatts 750	Horsepower	
Burner Type	(ago noto bolow)	% Used for Proces		100			
	(see note below)	% Used for Space	Heat	NA			
FUEL DAT	A						- 100
	Parameter		Prima	ry Fuel	Units	Secondary Fuel	Units
Fuel Code (s	ee note below)		0	2		NA	
Percent Sulf	ur		0	.5		0	
Percent Ash			()		0	
Percent Nitro	ogen		()		0	
Percent Carl	oon		()		0	
Percent Hyd	rogen		(0		0	
Percent Mois	sture		(0		0	
Heat Conten	t (BTU/unit)		133	440	Gal	0	
	ourly Combustion Ra	te (units/hr)	49).4	Gal	0	
	ual Combustion Rate	ANTON THE ISSA AS	24	700	Gal	0	
Note: Burner Type: 01 - Spread stoker 02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):		veling Grate nace pulverized coal) oulverized coal) okers Fired		Fu	el Codes: 01 - Natural 02 - #1 or #2 03 - #4 Fuel 04 - #5 or #6 05 - Used O 06 - Wood C 07 - Wood E 08 - Wood S 09 - Sander 10 - Subbitu 11 - Bitumin 12 - Anthrac 13 - Lignite 14 - Propan 15 - Other (s	P. Fuel Oil Oil Oil S Fuel Oil It Ships Sark Shavings Dust minous Coal ous Coal Ite Coal Ooal	

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

600

200

POLLUTION CONTROL EQUIPMENT

Parameter		P	rimary	Secondary
Туре		None	None	
Type Code (from APP.A)				
Manufacturer				
Model Number				
Pressure Drop (in. of water)				
Wet Scrubber Flow (GPM)				
Baghouse Air/Cloth Ration (FP	M)			
VENTILATION AND BUILD	DING/AREA DATA	L	STACK DATA	
Enclosed?	⊠ Yes □ No	0	Ground Elevation (ft)	2990
Hood Type (from APP.B)	NA		UTM X Coordinate (km)	592.2
Minimum Flow (acfm)	NA		UTM Y Coordinate (km)	4767.1
Percent Capture Efficiency	NA		Stack Type (see note below)	03
Building Height (ft)	35		Stack Exit Height from Ground Level (ft) 48

Stack Exit Diameter (ft)

Stack Exit Gas Flowrate (acfm)

Stack Exit Temperature (°F)

0.83

4217

734

AIR POLLUTION EMISSIONS

Building/Area Length (ft)

Building/Area Width (ft)

Note:

		Emission	Percent	Estimated or		Allowable Emis	sions
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM						0.18	
PM ₁₀						0.18	-
SO ₂						3.1	combined (3) gen
СО						1.38	
NO _X						18.1	combined (3) gen
VOC					-	0.18	
Lead	4			1		(
HAPs	-	-				0.002	
		***************************************			0		
	***************************************	-		_			
			******				3-2118-8-0

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

	DEQ USE ONLY				-		1
	DEQ Plant ID Code)		DEQ S	tack ID Code		
DEQ Building Code							
	DEQ Segment Code			Primar Second	dary SCC		
	DEQ Process Code				_		
SECTION	2, PART A.						
GENERAL	INFORMATION						
Process Cod	e or Description	ICOM 04 - Barri	er Flightline	Generator 01			
Stack Descri		Gen 04					
Building Des		NA					
Manufacture			Model	V465D		Date Installed	
						Date Last Modified	
RATED CA	PACITY (CHOOSI	E APPROPRIAT	E UNITS)				
Million BTU/I	nr.	1000 lbs Steam	/hr		Kilowatts 49.	2 Horsepower	
Burner Type	10	% Used for Pro		100			
Burnor Typo	(see note below)	% Used for Spa		NA			
		19 ESSE 121 - FS					
FUEL DAT	A						
	Parameter		Primar	y Fuel	Units	Secondary Fuel	Units
Fuel Code (s	ee note below)		1:	5		NA NA	
Percent Sulf			C)		0	
Percent Ash			C)		0	
Percent Nitro	ogen		C)		0	
Percent Carl			C)		0	
Percent Hyd	***)		0	
Percent Mois)		0	
Heat Conten		1000	125,	.000	Gal	0	
	ourly Combustion Ra	te (units/hr)	0.1		MMBTU	0	
	al Combustion Rate	Tel 18 1861 11	15		MMBTU	0	
Note:	: 01 - Spread stoke	r			Codes: 01 - Natura		
	02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):				02 - #1 or : 03 - #4 Fu 04 - #5 or : 05 - Used 06 - Wood 07 - Wood 08 - Wood 09 - Sande 10 - Subbi 11 - Bitum 12 - Anthra 13 - Lignite 14 - Propa	el Oil #6 Fuel Oil Oil Chips Bark Shavings er Dust tuminous Coal inous Coal acite Coal	

15 - Other (specifiy): Gas

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)	2.22.2	
Manufacturer	-	
Model Number	-	
Pressure Drop (in. of water)	1	
Wet Scrubber Flow (GPM)	3	
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILDING/AREA DATA

Enclosed?	Yes □ No
Hood Type (from APP.B)	NA
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	8 ·
Building/Area Length (ft)	12
Building/Area Width (ft)	8

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	590.3
UTM Y Coordinate (km)	4767.5
Stack Type (see note below)	04
Stack Exit Height from Ground Level (ft)	8 .
Stack Exit Diameter (ft)	0.328
Stack Exit Gas Flowrate (acfm)	916
Stack Exit Temperature (°F)	1300

AIR POLLUTION EMISSIONS

Pollutant		Emission Factor (see below)	Percent Control Efficiency	Estimated or		Allowable Emissions		
	CAS#			Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference	
PM						0.006		
PM ₁₀						0.006		
SO ₂		4				0.0048		
СО						3.75		
NO _x						0.048		
VOC			-			0.04		
Lead	-			2 22-22-2				
HAPs		7				0.0018		
				-				
			-	9 1 - 			3-	
*		3	-		-	*		

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

Г							1	
	DEQ USE ONLY			250	NI-ID Code			
	DEQ Plant ID Code			DEQ Stack ID Code Primary SCC				
	DEQ Building Code				-		-	
	DEQ Segment Cod			Secon	dary SCC _		-	
1	DEQ Process Code						_	
	2, PART A.							
rocess Code	e or Description	ICOM 05 - Barrier	Flightline	Generator 02				
tack Descrip	N.	Gen 05						
uilding Desc		NA						
Nanufacturer			Model	V465D	3.0	Date Installed		
iai iaiaotai oi	Tribodileii			•		Date Last Modified		
ATED CA	PACITY (CHOOSI	E APPROPRIATE	UNITS)					
/lillion BTU/h	nr:	1000 lbs Steam/h	r		Kilowatts 49	.2 Horsepower		
Burner Type	"	% Used for Proce		100				
zamor Typo	(see note below)	% Used for Space		NA	34			
		Washington Street, and the Street, Str						
UEL DATA	A							
	Parameter		Prima	ary Fuel	Units	Secondary Fuel	Units	
uel Code (se	ee note below)			15		NA		
ercent Sulfu	ur			0		0		
Percent Ash				0		0		
ercent Nitro	gen			0		0		
ercent Carb	oon		0			0		
Percent Hydr	rogen		0			0		
ercent Mois	sture			0		0		
leat Conten	t (BTU/unit)		129	5,000	Gal	0		
2.77	ourly Combustion Ra	te (units/hr)	0.	168	MMBTU	0		
	ıal Combustion Rate	CVIII 2006 - 100 1000	1	5.3	MMBTU	0		
<u>Note:</u> Burner Type:	rner Type: 01 - Spread stoker 02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):			Fue	03 - #4 Fu 04 - #5 or 05 - Used 06 - Wood 07 - Wood 09 - Sanboi 11 - Bitum 12 - Anthri 13 - Lignit 14 - Propa	#2 Fuel Oil el Oil #6 Fuel Oil Oil Chips Bark Shavings er Dust tuminous Coal inous Coal acite Coal		

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter:	Primary	Secondary
Туре	None	None
Type Code (from APP.A)		· · · · · · · · · · · · · · · · · · ·
Manufacturer	e yana	
Model Number	20000000	
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILDING/AREA DATA

SEITHER HOIT MILE BOILE	D1110/1711111111 - 171111	
Enclosed?		Ground
Hood Type (from APP.B)	NA	UTM X
Minimum Flow (acfm)	NA	UTM Y
Percent Capture Efficiency	NA	Stack T
Building Height (ft)	8	Stack E
Building/Area Length (ft)	12	Stack E
Building/Area Width (ft)	_8	Stack E

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	590.3
UTM Y Coordinate (km)	4767.5
Stack Type (see note below)	04
Stack Exit Height from Ground Level (ft)	8
Stack Exit Diameter (ft)	0.328
Stack Exit Gas Flowrate (acfm)	916
Stack Exit Temperature (°F)	1300

AIR POLLUTION EMISSIONS

		Emission	Percent	Estimated or	100	Allowable Emiss	sions
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM				3		0.006	
PM ₁₀						0.006	
SO ₂					-	0.0048	
СО						_3.75	
NO _x						0.048	
VOC						0.04	
Lead			(-			
HAPs						0.0018	
				-			

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

DEQ USE O	NI Y					7
	DEQ Plant ID Code DEQ Building Code		DEQ S	tack ID Code		
			Primar	SCC		
DEQ Segmen	· ·			lary SCC		
DEQ Process	EACTING CONTRACTOR					
						_
SECTION 2, PART A	λ.					
GENERAL INFORMATI	ON					
Process Code or Description	n ICOM 06 - Barri	er Flightline	e Generator 03			
Stack Description	Gen 06					
Building Description	NA					
Manufacturer Wisconsi	n	Mode	V465D		Date Installed	
					Date Last Modified	
RATED CAPACITY (CH	OOSE APPROPRIAT	E UNITS)				
Million BTU/hr	1000 lbs Steam	/hr		Kilowatts 49	.2 Horsepower _	
Burner Type	% Used for Prod	cess	100			
(see note b	elow) % Used for Spa	ce Heat	NA			
FUEL DATA						
Paramete	er	Primary Fuel		Units	Secondary Fuel	Units
Fuel Code (see note below)		15			NA	
Percent Sulfur			0		0	
Percent Ash			0		0	
Percent Nitrogen		4	0		0	
Percent Carbon			0		0	
Percent Hydrogen			0		0	
Percent Moisture			0		0	
Heat Content (BTU/unit)		12	5,000	Gal	0	
Maximum Hourly Combusti	on Rate (units/hr)	0	.168	MMBTU	0	
Normal Annual Combustion	n Rate (units/hr)		15.3	MMBTU	0	
lote: Furner Type: 01 - Spread stoker 02 - Chain or Traveling Grate 03 - Hand Fired 04 - Cyclone Furnace 05 - Wet Bottom (pulverized coal) 06 - Dry Bottom (pulverized coal) 07 - Underfeed Stokers 08 - Tangentially Fired 09 - Horizontally Fired 10 - Axially Fired 11 - Other (specify):			Fuel	03 - #4 Fu 04 - #5 or 05 - Used 06 - Wood 07 - Wood 08 - Wood 09 - Sand 10 - Subbi	#2 Fuel Oil rel Oil #6 Fuel Oil Oil I Chips I Bark I Shavings er Dust ituminous Coal inous Coal acite Coal	

15 - Other (specifiy): Gas

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)		
Manufacturer		
Model Number		
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILDING/AREA DATA

Enclosed?	
Hood Type (from APP.B)	NA
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	8
Building/Area Length (ft)	12
Building/Area Width (ft)	8

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	590.3
UTM Y Coordinate (km)	4767.5
Stack Type (see note below)	04
Stack Exit Height from Ground Level (ft)	8
Stack Exit Diameter (ft)	0.328
Stack Exit Gas Flowrate (acfm)	916
Stack Exit Temperature (°F)	1300

AIR POLLUTION EMISSIONS

		Emission Percent CAS # Factor Control (see below) Efficiency	Estimated or		Allowable Emissions		
Pollutant	CAS#		Control	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM						0.006	
~ PM ₁₀				200		0.006	
SO ₂				· · · · · · · · · · · · · · · · · · ·		0.0048	
CO						3.75	
NO _x						0.048	
VOC						0.04	-
Lead				4			-
HAPs						0.0018	
	\$					7-1-1-1	-
			×				

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

Ī	DEC USE ONLY						1	
	DEQ USE ONLY DEQ Plant ID Code			DEQ Stack ID Code				
	DEQ Building Code DEQ Segment Code			Primary SCC				
				Secondary SCC				
	DEQ Segment Cod				Idaly 000			
l	DEQ 1 locess code						_	
SECTION	2, PART A.							
GENERAL	INFORMATION							
Process Cod	e or Description	ICOM 07 - Barrie	er Flightline	Generator 04	1			
Stack Descrip	otion	Gen 07						
Building Des	cription	NA						
Manufacture	Wisconsin		Model	V465D		Date Installed		
						Date Last Modified		
RATED CA	PACITY (CHOOSI	E APPROPRIATE	E UNITS)					
Million BTU/h	r	1000 lbs Steam/l	hr		Kilowatts 49.	.2 Horsepower _		
Burner Type		% Used for Proc	ess	100				
	(see note below)	% Used for Space	e Heat	NA				
FUEL DATA	A							
	Parameter		Primary Fuel		Units	Secondary Fuel	Units	
Fuel Code (se	ee note below)		1	5		NA		
Percent Sulfu			(0		0		
Percent Ash			(0		0		
Percent Nitro	gen		(0		0		
Percent Carb				0		0		
Percent Hydr			0			0		
Percent Mois			0			0		
Heat Conten	Za suppressed to Figure 1		125	,000	Gal	0		
	ourly Combustion Ra	te (units/hr)		168	MMBTU	0		
	al Combustion Rate		15	5.3	MMBTU	0		
<i>Note:</i> Burner Type:	01 - Spread stoke 02 - Chain or Trav 03 - Hand Fired 04 - Cyclone Furn 05 - Wet Bottom (p 06 - Dry Bottom (p 07 - Underfeed St 08 - Tangentially P 09 - Horizontally F 10 - Axially Fired 11 - Other (specify	eling Grate ace pulverized coal) pulverized coal) okers Fired		Fu	03 - #4 Fu 04 - #5 or i 05 - Used 06 - Wood 07 - Wood 09 - Sande 10 - Subbi 11 - Bitum 12 - Anthra 13 - Lignite	#2 Fuel Oil el Oil #6 Fuel Oil Oil Chips Bark Shavings er Dust tuminous Coal inous Coal acite Coal		

OPERATING DATA

Percent Fuel Consumption Per Quarter		Operating Schedule		
Dec – Feb	25	Hours/Day	24	
Mar – May	25	Days/Week	7	
Jun – Aug	25	Weeks/Year	52	
Sep - Nov	25			

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)	<u></u>	
Manufacturer		
Model Number		410-40-40-40-40-40-40-40-40-40-40-40-40-40
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)	0	

VENTILATION AND BUILDING/AREA DATA

Enclosed?			
Hood Type (from APP.B)	NA		
Minimum Flow (acfm)	NA		
Percent Capture Efficiency	NA		
Building Height (ft)	8		
Building/Area Length (ft)	12		
Building/Area Width (ft)	8		

STACK DATA

Ground Elevation (ft)	2990		
UTM X Coordinate (km)	590.3		
UTM Y Coordinate (km)	4767.5		
Stack Type (see note below)	04		
Stack Exit Height from Ground Level (ft)	8		
Stack Exit Diameter (ft)	0.328		
Stack Exit Gas Flowrate (acfm)	916		
Stack Exit Temperature (°F)	1300		

AIR POLLUTION EMISSIONS

	CAS#	Emission Factor (see below)	Percent Control Efficiency	Estimated or Measured Emissions (lbs/hr)	Allowable Emissions		
Pollutant					lbs/hr	tons/yr	Reference
PM						0.006	
PM ₁₀						0.006	
SO ₂			(20)			0.0048	
СО	*					3.75	
NO _x						0.048	
VOC		-				0.04	
Lead							-4
HAPs		4				0.0018	
		<u> </u>					
	· · · · · · · · · · · · · · · · · · ·						

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

1.5 Jet Engine Testing Forms

Jet engine testing is performed at two facilities, Hush House I and Hush House II. Two engine types are currently permitted for testing at MHAFB, the F-100-220 and the F-100-229. MHAFB submitted a formal written request to DEQ in December 2006 for jet engine testing operational flexibility to be able to test any engine type that may be on the Base. Table 1.5-1 lists the permitted jet engine testing sources.

TABLE 1.5-1

Process Code	Process Description ¹	Emission Estimate Documentation ²		
JET-01	Hush House I and II combined	Section 4.5		

Notes:

¹ Refer to Section 2 of the permit application for additional detail.

² This column denotes the permit application section number of the emissions estimate documentation.

	DEQ USE ONLY DEQ Plant ID Code DEQ Building Code DEQ Segment Code			_ DEQ Stack Primary Stack Secondary	CC		
	DEQ Process Code						
SECTION	I 2, PART A.						
GENERAL	INFORMATION						
Process Cod	le or Description	Jet Engine Testin	ng				
Stack Descri	ption	Blast Deflector					
Building Des	cription	Hush House No.	1 (BLDG 1344)	Hush House	No. 2 (BLDG 27	Section 19 to 19 t	12000000
Manufacture	r Various		Model Va	rious		Date Installed	1986
		********	- HAUTO			Date Last Modified	
RATED CA	PACITY (CHOOSE	APPROPRIATE	: UNITS)				
Million BTU/	hr NA	1000 lbs Steam/	hr		Kilowatts	Horsepower	
Burner Type		% Used for Proc			-		
	(see note below)	% Used for Space	e Heat		=		
FUEL DAT	A						
	Parameter	:-	Primary Fu	el :	Units	Secondary Fuel	Units'
Fuel Code (s	see note below)		15				
Percent Sulf	ur					×2	
Percent Ash						-	
Percent Nitro	ogen						
Percent Carl	bon						
Percent Hyd	rogen						
Percent Moi	sture						
Heat Conter	nt (BTU/unit)				-		-
Maximum H	ourly Combustion Rate	e (units/hr)					
Normal Ann	ual Combustion Rate ((units/hr)					+
<u>Note:</u> Burner Type	e: 01 - Spread stoker 02 - Chain or Trave 03 - Hand Fired 04 - Cyclone Furna 05 - Wet Bottom (p 06 - Dry Bottom (p 07 - Underfeed Sto 08 - Tangentially F 09 - Horizontally Fi	nce ulverized coal) ulverized coal) okers ired		Fuel Co	02 - #1 o 03 - #4 F 04 - #5 o 05 - Use 06 - Woo 07 - Woo	r #2 Fuel Oil fuel Oil r #6 Fuel Oil d Oil d Chips d Bark d Shavings	

09 - Sander Dust 10 - Subbituminous Coal 11 - Bituminous Coal 12 - Anthracite Coal 13 - Lignite Coal 14 - Propane

15 - Other (specifiy): JP-8

10 - Axially Fired 11 - Other (specify):

SECTION 2, PART B.

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary 3 4 4 4 4
Туре	None	None
Type Code (from APP.A)		
Manufacturer	The state of the s	4
Model Number		
Pressure Drop (in. of water)	(
Wet Scrubber Flow (GPM)		V-100
Baghouse Air/Cloth Ration (FPM)		
VENTU ATION AND BUILDING/AREA D	ATA STA	CK DATA

Enclosed?	Yes □ No
Hood Type (from APP.B)	None
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	25
Building/Area Length (ft)	206
Building/Area Width (ft)	98

Ground Elevation (ft)	2990
UTM X Coordinate (km)	591.0
UTM Y Coordinate (km)	4767.58
Stack Type (see note below)	02
Stack Exit Height from Ground Level (ft)	15
Stack Exit Diameter (ft)	20
Stack Exit Gas Flowrate (acfm)	Varies
Stack Exit Temperature (°F)	Varies

AIR POLLUTION EMISSIONS

Mathematical Company		Emission	Percent Estimated or		Allowable Emis	sions	
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM				<u></u>		4.0	1
PM ₁₀						4.0	
SO ₂						_1.5	
со						_63	
NO _x						85	
voc						_13	
Lead		100 Land 100	y			(
HAPs			-			0.46	
		-					-
		-					

Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section. Note:

1.6 Surface Coating Forms

This category includes painting operations conducted in spray booths, outside the hangar doors, and static displays. Table 1.6-1 lists the permitted surface coating sources.

TABLE 1.6-1 Surface Coating Description

Process Code	Process Description ¹	Emission Estimate Documentation ²
SC-01	Large Paint Booth (Building 1330)	Section 4.6
SC-02	Small Paint Booth (Building 1330)	Section 4.6
SC-03	Flightline Open-Area Spraying	Section 4.6
SC-04	Transportation Paint Booth (Building 1100)	Section 4.6

Notes:

Refer to Section 2 of the permit application for additional detail.
 This column denotes the permit application section number of the emissions estimate documentation.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ DEQ DEQ	USE ONLY Plant ID Code Building Code Segment Cod Process Code) Je	Primary	ack ID Code SCC ary SCC		
SECTION 3, P	ART A.					
GENERAL INFO	RMATION					
Process Code or D	escription	Surface Coating 01	- Large Aircraft Paint B	ooth		
Stack Description		Four Stacks, Identic	al			
Building Description	ń	Building 1330				
//anufacturerJ	BI, Inc		Model NA		Date Installed	1995
PROCESSING D	АТА				Date Last Modified	X =11-1
Process Stream	Mat	erial Description	Maximum Hourly Rate	Actual Hourly Rate	Units	
nput						
Input Product Output Waste Output						

POTENTIAL HAPS IN PROCESS STREAM(S)

HAP Description	HAP CAS Number	Fraction In Input Stream by Weight	Fraction In Product Stream by Weight	Fraction in Waste Stream by Weight	Fraction in Recycle Stream by Weight
	-	-	10	<u> </u>	-

SECTION 3, PART B.

OPERATING DATA

Percent Fuel Consumption Per Quarter		Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep – Nov	25		

Parameter	Primary	Secondary
Туре	GAC Filters	Fiber Filters
Type Code (from APP.A)		
Manufacturer		
Model Number		
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILDING/AREA DATA

STACK DATA

Groun	d Elevation (ft)	2990	
UTM >	Coordinate (km)	591.26	
UTM Y	Coordinate (km)	4767.52	
Stack	Type (see note below)	03	
Stack	Exit Height from Ground Level (ft)	51	
Stack	Exit Diameter (ft)	3.0	
Stack	Exit Gas Flowrate (acfm)	21900	
Stack	Exit Temperature (°F)	80	

AIR POLLUTION EMISSIONS

		Emission	Percent	Estimated or	Allowable Emissions		
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM			-			_0.078	
PM ₁₀						0.078	
SO ₂							
СО	2	_					
NO _X							
VOC						0.015	
Lead		-					
HAPs						0.0227	
-				A	D====1	-	
-	• • • • • • • • • • • • • • • • • • • •	-	*			7	

<u>Note:</u> Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEQ DEQ DEQ	DEQ USE ONLY DEQ Plant ID Code DEQ Building Code DEQ Segment Code DEQ Process Code DEQ Process Code					
SECTION 3, P.	ART A.					
GENERAL INFO	RMATION					
Process Code or De	escription	Surface Coating 02 - Sm	nall Parts Paint Boot	h		
Stack Description		Stack				
Building Description	ı .	Building 1330				
ManufacturerJI	3I, Inc	Mo	del NA		Date Installed Date Last Modified	1995
Process Process Stream Input	TO THE USE OF THE STREET	rial Description	Maximum Hourly Rate	Actual Hourly Rate	- Units	
Product Output		-			*	
Waste Output Recycle	-		<u> </u>			
POTENTIAL HAI		ESS STREAM(S) HAP CAS Number	Fraction In Input Stream by Weight	Fraction In Product Stream by Weight	Fraction in Waste Stream by Weight	Fraction in Recycle Stream by Weight

SECTION 3, PART B.

OPERATING DATA

Percent Fuel Consumption Per Quarter		Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Primary	Secondary
Fiber Filters	

VENTILATION AND BUILDING/AREA DATA

VENTILATION AND BUILD	JING/AKEA DATA
Enclosed?	Yes □ No
Hood Type (from APP.B)	· .
Minimum Flow (acfm)	-
Percent Capture Efficiency	
Building Height (ft)	48
Building/Area Length (ft)	296
Building/Area Width (ft)	128

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	591.26
UTM Y Coordinate (km)	4767.52
Stack Type (see note below)	_03
Stack Exit Height from Ground Level (ft)	51
Stack Exit Diameter (ft)	3.0
Stack Exit Gas Flowrate (acfm)	16400
Stack Exit Temperature (°F)	80

AIR POLLUTION EMISSIONS

Pollutant	CAS#	Emission Percent Factor Control (see below) Efficiency	Darcont	Estimated or	Allowable Emissions		
			Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference	
PM				2015-1		_0.044	
PM ₁₀						0.044	
SO ₂		4					
СО		_	12-10				
NOx		_					
VOC		_		<u></u>		0.0088	
Lead			8	1			
HAPs				-		0.0248	-
							::
	-		9 <u></u>	<u> </u>			
	-						-

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEC DEC	NUSE ONLY Plant ID Cod Building Cod Segment Co	de <u></u>	DEQ St. Primary Second			
SECTION 3, F						
Process Code or D		Surface Coating 03 - F	lightline Open-Area S	Spraying		
Stack Description		NA				
Building Descriptio	n	Aircraft Staging Area				
Manufacturer		N	odel		Date Installed	
PROCESSING D	50 A 10 10 10 10 10 10 10 10 10 10 10 10 10	terial Description	Maximum Hourly Rate	Actual Hourly Rate	Date Last Modified Units	
Input	Paint		NA	NA	NA	
Product Output	Painted \	/ehicles	NA	NA	NA	
Waste Output					·	
Recycle						
POTENTIAL HA	PS IN PROC	CESS STREAM(S)	Fraction In Input Stream	Fraction In	Fraction in Waste Stream	Fraction in Recycle Stream

SECTION 3, PART B.

OPERATING DATA

Percent Fuel Consu	imption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter	Primary	Secondary
Туре	None	None
Type Code (from APP.A)		V
Manufacturer		
Model Number		
Pressure Drop (in. of water)		200
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		-

VENTILATION AND BUILDING/AREA DATA

Enclosed?	☐ Yes ☐ No
Hood Type (from APP.B)	NA
Minimum Flow (acfm)	NA
Percent Capture Efficiency	NA
Building Height (ft)	NA
Building/Area Length (ft)	NA
Building/Area Width (ft)	NA

STACK DATA

Ground Elevation (ft)	2990
UTM X Coordinate (km)	592.22
UTM Y Coordinate (km)	4767.07
Stack Type (see note below)	NA
Stack Exit Height from Ground Level (ft)	NA
Stack Exit Diameter (ft)	NA
Stack Exit Gas Flowrate (acfm)	NA
Stack Exit Temperature (°F)	NA

AIR POLLUTION EMISSIONS

		Emission Percer	Percent	Estimated or	Allowable Emissions		
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
PM				<u> </u>			
PM ₁₀				4			P
SO ₂	(2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1						
CO		-					
NO _x					<u> </u>		-
VOC		·					
Lead							
HAPs	-						1
						-	
	*	·		-			
		25	2				

Note: Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in Ibs/units. Please use same hourly units given in fuel data section.

SECTION 3: PROCESS AND MANUFACTURING OPERATIONS

DEC DEC	Q USE ONLY Q Plant ID Code Q Building Code Q Segment Code Q Process Code		DEQ Sta	The state of the s			
SECTION 3, I	PART A.						
Process Code or I Stack Description		Surface Coating 04 - Tr	ansportation Paint Bo	ooth			
Building Description	on	Building 1100					
Manufacturer _		M	odel		Date Installed		
PROCESSING I	DATA	25, 3, 1450 (5-5, 1882 (1457 - 1457 - 157)	Maximum y	Actual	Date Last Modified		
Process Stream	Mate	rial Description	Hourly Rate	Hourly Rate	Units		
Input	Paint		NA	NA	NA		
Product Output	Painted Ve	nicles	NA	NA	NA		
Waste Output					V		
Recycle			1				
POTENTIAL HA	APS IN PROCE	SS STREAM(S)	Fraction In	Fraction In Product Stream	Fraction in Waste Stream	Fraction in Recycle Stream	

SECTION 3, PART B.

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	24
Mar – May	25	Days/Week	7
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter	Primary.	Secondary
Туре	AG-28 Fiberglass	None
Type Code (from APP.A)		
Manufacturer		
Model Number		
Pressure Drop (in. of water)		
Wet Scrubber Flow (GPM)		
Baghouse Air/Cloth Ration (FPM)		

VENTILATION AND BUILD	DING/AREA DATA	STACK DATA	
Enclosed?		Ground Elevation (ft)	2990
Hood Type (from APP.B)	NA	UTM X Coordinate (km)	592.22
Minimum Flow (acfm)	NA	UTM Y Coordinate (km)	4767.07
Percent Capture Efficiency	NA	Stack Type (see note below)	03
Building Height (ft)	16	Stack Exit Height from Ground Level (ft)	30
Building/Area Length (ft)	50	Stack Exit Diameter (ft)	4.0
Building/Area Width (ft)	16	Stack Exit Gas Flowrate (acfm)	25600
		Stack Exit Temperature (°F)	70

AIR POLLUTION EMISSIONS

		Emission	Percent	Estimated or		Allowable Emissions		
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference	
PM								
PM ₁₀								
SO ₂		-	1					
CO								
NO _x				-				
VOC		*				4.0	-	
Lead								
HAPs			30		-			
			ч-					
		***		-				
	2			-				

Stack Type: 01 - Downward; 02 - Vertical (uncovered); 03 - Vertical (covered); 04 - Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section. Note:

1.7 Fugitive Dust Forms

This category includes on the Base operations resulting in fugitive dust emissions. Table 1.7-1 lists the fugitive dust sources.

TABLE 1.7-1 Fugitive Dust

Process Code	Process Description ¹	Emission Estimate Documentation ²
FD-01	Landfill Operations (Dozing and Grading)	Section 4.7
FD-02	Paved and Unpaved Roads	Section 4.7

Notes:

Refer to Section 2 of the permit application for additional detail.
 This column denotes the permit application section number of the emissions estimate documentation.

SECTION 7: SOLID MATERIAL TRANSPORT, HANDLING, AND STORAGE

DEQ USE ONLY DEQ Plant ID Code DEQ Building Code DEQ Segment Code DEQ Process Code	Pri	EQ Stack ID Code rimary SCC econdary SCC	
SECTION 7, PART A.			
GENERAL INFORMATION			
Process Code or Description	Landfill Operations (Dozing/C	/Grading)	
Stack Description	NA		
Building Description	NA		
Date Installed	1969	or Date Last Modified	4
Material Description	<u></u>		_
MATERIAL TRANSFER RATES			
Maximum Hourly Transfer Rate (units/hr) Normal Hourly Transfer Rate (units/hr)	9 hr/day		
Normal Annual Transfer Rate (units/yr)	2340		
Unit of Measure	hr		
BELT CONVEYOR/VEHICLE TRANS	FER		
Number of Transfers	Material Moisture Content (weight %)	Maximum Hourly Wind 7.9 Speed (mph)	
Conveyors Enclosed? ☐ Yes ☐ No	Conveyors in Buildings?	☐ Yes ☐ No Average Hourly Wind	
Transfers Enclosed? Yes No	Transfers in Buildings?	☐ Yes ☐ No Speed (mph)	
PNEUMATIC CONVEYOR TRANSFE	RS		
Material Moisture Content (weight %)			
Primary Separator Type		Primary Separator % Efficiency	
Secondary Separator Type		Secondary Separator % Efficiency	_
MATERIAL STORAGE DATA			
Pile? ☐ Yes ☐ No	Storage Capacity	Pile Length (ft)	
Silo? ☐ Yes ☐ No	Storage Capacity Units	Pile Width (ft)	
Other Storage Type Description		Pile Height (ft)	
MATERIAL DATA	144		
HAP Description	on.	HAP CAS Number HAP Fraction in. Material by Weight	
			_

SECTION 7, PART B.

OPERATING DATA

Percent Fuel Consu	mption Per Quarter	Operating S	Schedule
Dec – Feb	25	Hours/Day	9
Mar – May	25	Days/Week	5
Jun – Aug	25	Weeks/Year	52
Sep - Nov	25		

POLLUTION CONTROL EQUIPMENT

Parameter			Primary	Secondary	
Туре		NA		NA	
Type Code (from APP.A)					
Manufacturer					
Model Number	4	2			
Pressure Drop (in. of water)					
Wet Scrubber Flow (GPM)					
Baghouse Air/Cloth Ration (FP	M)				
VENTILATION AND BUILD	DING/AREA DA	ATA	STAC	CK DATA	
Enclosed?	☐ Yes 🗵	☑ No	Ground Elevation (ft)		
Hood Type (from APP.B)			UTM X Coordinate (km)		
Minimum Flow (acfm)			UTM Y Coordinate (km)		
Percent Capture Efficiency			Stack Type (see note b	elow)	
Building Height (ft)			Stack Exit Height from (Ground Level (ft)	
Building/Area Length (ft)			Stack Exit Diameter (ft)		

Stack Exit Gas Flowrate (acfm) Stack Exit Temperature (°F)

AIR POLLUTION EMISSIONS

Building/Area Width (ft)

		Emission Perc	Percent	Estimated or		Allowable Emis	sions
Pollutant	CAS#	Factor (see below)	Control Efficiency	Measured Emissions (lbs/hr)	lbs/hr	tons/yr	Reference
РМ		-		9.09			
PM ₁₀		100		9.09			
SO ₂			45	8			
CO		-	Auto-	0.22			
NO _x							.,,
VOC	1			,		-	4
Lead							
HAPs			-	0.36			
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
		MINE TO SERVICE OF THE PARTY OF		-			
						-	

<u>Note:</u> Stack Type: 01 – Downward; 02 – Vertical (uncovered); 03 – Vertical (covered); 04 – Horizontal; 05 - Fugitive Emission Factor in lbs/units. Please use same hourly units given in fuel data section.

SECTION 8: FUGITIVE ROAD DUST SOURCES

1424 343	Saving on the Same Assessment	Was 5, 6991110 1870	1488 CARREL	S. N. S.	a salaraki gari	E A SELECTION	
011	Q USE ONLY		DEO.	or 1 10 o 4			
100	Q Plant ID Code		BANKS OF THE LOCAL PROPERTY OF THE PARTY OF	Stack D Code ry SCC			
	Q Building Code O Segment Code		A THE RESERVE ASSESSMENT ASSESSMENT	ndary SCC			
125	Q Process Code		Jecoi	idary 000			# <i>D</i>
[DC	Q1,100033 GOOD				STAME AS ALL A DRIVE THE MANUAL STATE OF THE PARTY OF THE	en e en	
SECTION 8,	PART A.						
GENERAL INFO	ORMATION						
Road Description	Paved Roads						
_ength (ft)			ning Coordinate:		-	nd Coordinate	
Width (ft)		UTM-X (km)		<u>1-Y (km)</u>	UTM-X (km)	}	UTM-Y (km)
Paved?	⊠ Yes □ No	593.21	47	69.03	593.21		4769.03
DATA FOR ALI	L ROADS – PAVED AN	D UNPAVED					
	/enicle Description	T.	Number of Roundtrips Per Day	Vehicle Miles Traveled Per Day	Number of Days Used Per Year	Average Vehicle Speed (mph)	Surface Silt Content (% Weight)
Cars			5810	11621	365	30	NA
Pickups			7112	14225	365	30	NA
Trucks (2 and 3 a	ixel)		90	89	365	30	NA
Motorcycles			16	31	365	30	NA
	Vehicle Description		Vehicle Empty Weight (tons)	Vehicle Full Weight (tons)			
Cars			2	NA			
Pickups			3	NA			
Trucks (2 and 3 a	ixel)	-	4.61	NA			
Motorcycles	***************************************		0.75	NA		8	
DATA FOR UN	PAVED ROADS			DATA FOR	R PAVED ROAD	s	
Number of Wheels Per Vehicle	Number of Days >0.01 Inches Precipitation			Number of Lanes	Indus Augmer Fact	itation	Dust Loading (lb/mile)
NA	NA			2	1		7.4 (g/m^2)
NA	Na						
NA	NA				-		
NA	NA				<u> </u>		
ROAD DUST C	HEMICAL DATA			*			
	HAP Description		HAP CAS	Number	HAP Frac Road D Weig	ust by	
and the same		was delicated to the	COLUMN TO SERVICE STATE OF THE	COLUMN TO SERVICE STATE OF THE	-	CONTRACTOR OF THE PARTY OF THE	
NA			N	A	N/	4	

SECTION 8, PART B.

OPERATING DATA

Percent Fuel Consu	mption Per Quarter
Dec – Feb	25
Mar – May	25
Jun – Aug	25
Sep - Nov	25

Operating Schedule			
Hours/Day	24		
Days/Week	7		
Weeks/Year	52		

FUGITIVE DUST CONTROL DATA

	Parameter
Control Des	scription
Control Cod	de (Appendix A)
Minimum D	aily Applications of Control
Maximum D	Daily Applications of Control
Average Ar	nnual Applications of Control
Amount Ap	plied (units/application)
Units for Ar	oplication Amount

Primary	Secondary
NA	NA
	:
	7200

AIR POLLUTANT EMISSIONS

Pollutant CAS Number PM PM-10 Lead	RAMERA PROPERTY AND AND AND ADDRESS.	Emission Factor	Percent Control	Estimated or Measured Emissions	Allowable Emissions		
	(see below)	Efficiency	(lbs/hr) 500 97 0.01	*Lbs/Hr	Tons (Yr	Reference	

Note: In Ibs./unit of vehicle miles traveled (VMT).

SECTION 8: FUGITIVE ROAD DUST SOURCES

6	DEQ USE ONLY		#44.4.4					
	DEQ Plant ID Code		DEQ	Stack ID Code		11.4 公司		
	DEQ Building Code		Prima	ary SCC				
	DEQ Segment Code		Seco	ndary SCC		Append .		
2.5	DEQ Process Code							
SECTION	8, PART A.							
	NFORMATION							
Road Descript	ion Unpaved Roads							
.ength (ft)		Begin	ning Coordinate	<u>s</u>	E	nd Coordinate	<u>es</u>	
Width (ft)		UTM-X (km)	UTI	<u> </u>	UTM-X (km)		UTM-Y (km)	
Paved?	☐ Yes No	593.21	4	769.03	593.21	593.21 4		
DATA FOR	ALL ROADS - PAVED AN	D UNPAVED						
	Vehicle Description		Number of Roundtrips Per Day	Vehicle Miles Traveled Per Day	Number of Days Used Per Year	Average Vehicle Speed (mph)	Surface Silt Content (% Weight)	
Cars			29	29	365	10	6.4	
Pickups			32	31	365	10	6.4	
Frucks (2 axel)		60	60	365	10	6.4	
Frucks (3 axel)		10	10	365	10	6.4	
Cars	Vehicle Description		Empty Weight (tons)	Full Weight (tons) NA				
Pickups			3	NA				
Trucks (2 and	3 axel)		4.25	NA				
Motorcycles			6	NA				
DATA FOR	UNPAVED ROADS			DATA FOR	PAVED ROAL	os		
Number of Wheels Per Vehicle				Number of Lanes	Indus Augme Fac	ntation tor	Dust Loading (lb/mile)	
4	72			NA	N	Α	NA	
4				_	<u> </u>			
	72			-	-			
6						-		
6 18	T CHEMICAL DATA							
6 18			HAP CAS	S Number	HAP Fra Road D Wei	ust by		
6 18	CHEMICAL DATA			S Number A	Road D	ust by ght		

SECTION 8, PART B.

OPERATING DATA

Percent Fuel Consu	mption Per Quarter
Dec – Feb	25
Mar – May	25
Jun – Aug	25
Sep - Nov	25

Operating Schedule		
Hours/Day	24	
Days/Week	7	
Weeks/Year	52	

FUGITIVE DUST CONTROL DATA

Parameter	Primary 1	Secondary
Control Description	NA	NA
Control Code (Appendix A)		
Minimum Daily Applications of Control		
Maximum Daily Applications of Control		
Average Annual Applications of Control		
Amount Applied (units/application)		
Units for Application Amount		

AIR POLLUTANT EMISSIONS

Pollutant CAS Number	Emission Factor (see	Control Measured	The second secon				
PM PM-10 Lead	PM PM-10	(lbs/hr) 14 3.7 0.00017	Lbs/Hr	Tons/Yr	Reference		

Note: In lbs./unit of vehicle miles traveled (VMT).

2.0 General Information for the Facility

2.1 Introduction

IDAPA 314 Required Standard Application Form and Required Information.

- 02. General Information for the Facility.
 - a. Provide identifying information, including the name, address and telephone number of:
 - i. The owner;
 - The operator;
 - iii. The facility where the Tier I source is located;
 - iv. The registered agent of the owner, if any;
 - v. The registered agent of the operator, if any;
 - vi. The responsible official, if other than the owner or operator; and
 - vii. The contact person.
 - b. Provide a general description of the processes used and products produced by the facility where the Tier I source is located, including any associated with each requested alternative operating scenario and trading scenario. The description shall include narrative and applicable SIC codes.
 - c. Provide a general description of each process line affecting a Tier I source.

The information required by IDAPA 314.02.a is included in the General Information Form found in Section 1.0, Application Forms, of this application. The information required by IDAPA 314.02.b and c is provided in this section and includes a brief description of the primary emission sources at MHAFB. MHAFB is host to a variety of organizations providing scientific and technical support to agencies throughout the USAF and the Department of Defense (DoD). IDEQ issued MHAFB SIC code 9711, defined as National Security or DoD, USAF.

Process	SIC Code	SIC Description
National Security	9711	United States Air Force

2.2 Abrasive Blasting

Only one permitted abrasive cleaner or "bead blaster" is located at MHAFB, which vents to the atmosphere. This bead blaster is a self-contained hopper containing a cyclone and tube fabric filters. This bead blaster is located inside Building 1330. The only opening is located outside the hopper, at the point of discharge, before it drops into a 55-gallon drum. The bead blaster unit is only used intermittently throughout the year. The bead blaster has an annual operating limit of 4,500 hours per year.

This bead blaster is required to maintain an air quality PTC. Bead blasting is a surface coating removal process of aircraft parts using either plastic or glass beads. Compressed air propels the beads through a high-pressure nozzle to remove surface coating upon contact of the parts surface. The beads and resulting chips of surface coatings pass through cyclone and tube fabric filters that separate the beads (to be reused) from the chips as well as limit paint chips containing hexavalent chromium (Cr^{+6}) ions from escaping into the atmosphere.

2.3 External Combustion Engines

At this time, there are 636 ECOM sources at MHAFB. The total number of ECOM sources change annually due primarily from building improvements and new building construction. Currently, the only ECOM sources permitted are four hospital dual-fueled boilers (Building 6000). Three are Kewanee hospital boilers each with a heat input rating of 5,231,000 Btu/hr and one is a Hurst hospital boiler with a heat input rating of 1,050,000 Btu/hr. The four hospital boilers are permitted to operate distillate fuel not to exceed 500 hours per year per boiler. No operating limit applies when the boilers combust natural gas. Sulfur oxide (SO_X) emissions are stated as a permit condition not to exceed 2.1 tpy per any consecutive 12-month period when combusting distillate fuel.

2.4 Internal Combustion Engines

At this time, there are 57 ICOM sources at MHAFB. Seven of these ICOM sources are permitted; four flightline barrier generators and three hospital generators. During the renewal process, MHAFB determined that the generator located at the WWTP does not meet the criteria for being an insignificant activity. MHAFB submitted a self discovery letter in February 2007 and will be submitting a PTC application also. The remaining ICOM sources are insignificant based on size or production rate. The ICOM sources operate on diesel, natural gas, or gasoline.

2.4.1 Flightline Generators

On August 22, 2006, MHAFB submitted a PTC application to address four barrier generators located on the flightline. The flightline barrier generators work in tandem, two at each end of the runway. Each barrier generator has a 65.9-horsepower (hp) rating and is tested for 15 minutes per day or approximately 92 hours per year. The flightline generators combust gasoline and are used to reset the arrestor cables. In the event that an aircraft must make an emergency stop, the pilot deploys a hook that snags an arrestor cable as the aircraft passes, stopping the aircraft. The arrestor cables must be reset immediately after each use. MHAFB established a self-imposed limit based on potential hours of operation for each barrier generator limited to 250 hours per year.

BOI063400001.DOC/KM 2-2

2.4.2 Hospital Generators

Three permitted hospital generators are used to provide emergency power to the hospital in the event of a power failure. Each emergency generator is rated at 750 kW and limited not to exceed 500 hours per year. These three generators operate on No. 2 diesel fuel with the capability of running independently or in unison.

2.5 Jet Engine Testing

MHAFB performs jet engine testing at two facilities; Hush House I (Building No. 1344) and Hush House II (Building No. 270). The two buildings are located at opposite ends of the runway and are similar buildings in design containing augmentor tubes for aircraft exhaustion. The testing performed at Hush House I is on engines removed from aircraft and mounted on a test stand (stationary source) for adjustment and/or repair. After completion of engine adjustments and repairs, testing commences at idle, approach, intermediate, military, and/or afterburner power settings for a short duration.

Jet engine testing performed at Hush House II is mostly used for engines mounted in the aircraft. Testing of engines mounted in the aircraft are considered mobile sources. However, Hush House II has the ability to test engine aircraft mounted on a test stand by removing the engine from the aircraft. This Tier I permit applies to jet engine testing for stationary sources affixed to a test stand.

Currently two engine types are permitted for testing at MHAFB, the F-100-PW-220 and the F-100-PW-229. The two existing engine types tested combust JP-8 aviation fuel. MHAFB is requesting operational flexibility to be able to test any engine type that may be on the Base. Tier I jet engine testing permit limits will remain the same and be used as a "bubble limit." MHAFB is proposing to calculate emissions each month based off each engine type for a cumulative total. The cumulative emission totals will be compared to the permitted emission rate limits to track emissions to the "bubble limit".

2.6 Surface Coating

This category includes painting operations conducted in spray booths, outside the hangar doors, and static displays. Four surface coating operations are permitted at MHAFB: aircraft paint booth (Building 1330), aircraft parts paint booth (Building 1330), flightline open-area spraying, and the transportation paint booth (Building 1100). Surface coating was classified according to the following categories:

- Primers: coatings that are designed for application to a surface to provide a firm bond between the substrate and subsequent coating.
- Polyurethane coatings: topcoats that are commonly used due to their high resistance to corrosion. Polyurethane coatings contain a resin (base) component and catalyst (hardener) component that are mixed together—normally three parts of resin to one part of catalyst.
- Enamels: topcoats that are characterized by their ability to form a smooth surface.

BOI063400001.DOC/KM 2-3

- Lacquers: coating with composition based on synthetic thermoplastic film—forming materials dissolved in organic solvent.
- Thinners: volatile liquids added to a coating to reduce its viscosity.

2.6.1 Aircraft Paint Booth

Two spray paint booths are located in Building 1330. The items to be painted are first cleaned with solvents, then painted using high volume low pressure (HVLP) paint spray guns.

The larger of the two permitted spray booths is called the aircraft paint booth. This paint booth is large enough to contain a fighter aircraft for surface preparation and/or full or partial paint coats. The aircraft paint booth has a daily throughput limit of 684 gallons per day (gal/day) or 1,250 gallons per any consecutive 12-month period. The aircraft paint booth contains fiber filters for controlling particulates (97 percent efficiency) and activated carbon filters for controlling VOCs (90 percent efficiency).

2.6.2 Aircraft Parts Paint Booth

The aircraft parts paint booth is the smaller of the two permitted spray booths located in Building 1330. This paint booth is used for spray coatings of various aircraft parts. The aircraft parts paint booth has a daily throughput limit of 140 gal/day or 350 gallons per any consecutive 12-month period. The aircraft parts paint booth contains fiber filters for controlling particulates (97 percent efficiency).

2.6.3 Flightline Open-Area Spraying

These operations include small spray or touch-up paint applications on the flightline, outside hanger doors, and on aircraft static displays. Throughput limits are 16.1 gal/day or 300 gallons per any consecutive 12-month period. In addition, VOC emissions are limited to 1.5 tpy.

2.6.4 Transportation Paint Booth

Building 1100 contains a vehicle spray paint booth used to spray coat Base vehicles and parts as required. HVLP spray paint guns are required for bulk-paint applications. The transportation paint booth has an annual throughput limit of 300 gallons per any consecutive 12-month period. In addition, VOC emissions are limited to 4.0 tpy.

2.7 Fugitive Sources

Fugitive emissions at MHAFB that are not considered insignificant activities come from two primary operations, landfill operations (bulldozing and grading) and vehicular traffic over paved roads and unpaved roads.

2.7.1 Landfill Operations

The active MHAFB municipal solid waste landfill (MSWLF) occupies approximately 105 acres in the southwest corner of the Base. This landfill has been in operation by MHAFB since 1969. It is estimated that the MSWLF will be active until the year 2016, and the post-

BOI063400001.DOC/KM 2-4

closure care periods will be 30 years (until the year 2046). The Base MSWLF is not open to the general public. It currently serves a military population of approximately 5,200 residents. The Base MSWLF received an estimated 2,718 MG/yr of waste in CY 2005 (2005 MHAFB Air Emissions Inventory; CH2M HILL, 2005).

The Operable Unit No. 1 Limited Field Investigation Record indicated hazardous materials have not been placed in the MSWLF. Currently, batteries, used oil, tires, bulk liquids, improperly prepared asbestos, and hazardous and PCB wastes are prohibited from disposal. Scavenging of landfill material also is prohibited. The MSWLF currently utilizes three trenches, one for wood and rubble, one for properly prepared asbestos, and one for municipal solid waste (MSW). Daily cover is at least 6 inches thick, with the exception of the wood rubble cell, which does not require daily cover. Native soils between the bottom of the cells and basalt bedrock are silty clays approximately 10 feet thick (J.J. Howard Engineering and Surveying, 1996).

The active MSWLF at MHAFB operates 9 hours per day, 5 days per week, 52 weeks per year for a total of 2,340 hours. Bulldozing of overburden material and grading represent the sources of fugitive dust.

The inactive B Street Landfill ceased receiving refuse in 1969 and was covered and revegetated in 1994. Any remaining volatile emissions emanating from this landfill are considered negligible. According to Base records, no construction/demolition material was deposited in the B Street Landfill in calendar year 2005.

2.7.2 Paved Roads

Particulate emissions may occur whenever a vehicle travels over a paved surface such as a road or parking lot. Fugitive particulate emissions from paved roads are due to resuspension of loose material (mainly soil and tire particles) on the road surface. Base roads are paved with exception of the landfill.

2.7.3 Unpaved Roads

Particulate emissions may occur when a vehicle travels over an unpaved road. Surface particles are lifted and dropped from the rolling wheels. The road surface is exposed to strong air currents as the vehicle passes and suspends dust in the air. For purposes of this Tier I renewal application, the unpaved roads at the active landfill will be evaluated.